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FIRST NAMED INVENTOR ATTORNEY DOCKET NO. HEATH <u> USA96-UI</u> LM02/0810 **EXAMINER** JAMES M SMITH SMITHERS, M HAMILTON BROOK SMITH & REYNOLDS TWO MILITIA DRIVE **ART UNIT** PAPER NUMBER LEXINGTON MA 02173 2764

Please find below and/or attached an Office communication concerning this application or proceeding.

See attached

Commissioner of Patents and Trademarks

Office Action Summary

Application No. 08/707,622

Applicant(s)

Clifford Heath et al

Examiner

Matthew Smithers

Group Art Unit 2764

X Responsive to communication(s) filed on Sep 5, 1996	
☐ This action is FINAL.	
☐ Since this application is in condition for allowance except for formal matters, in accordance with the practice under Ex parte Quay/1935 C.D. 11; 453 O.G. 2	prosecution as to the merits is closed 213.
A shortened statutory period for response to this action is set to expire <u>three</u> longer, from the mailing date of this communication. Failure to respond within the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be 37 CFR 1.136(a).	e period for response will cause the
Disposition of Claim	
	is/are pending in the applicat
Of the above, claim(s)	
Claim(s)	
Claim(s) 6, 10-20, 22-30, 36, 41-51, 53-59, 63, and 64 Claims Claims	
Claims al	re subject to restriction or election requirement.
Application Papers	
See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948	3.
☐ The drawing(s) filed on is/are objected to by the E	xaminer.
☐ The proposed drawing correction, filed on is ☐ a	pproveddisapproved.
☐ The specification is objected to by the Examiner.	.,,
☐ The oath or declaration is objected to by the Examiner.	
Priority under 35 U.S.C. § 119	
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. §	119(a)-(d).
☐ All ☐Some* None of the CERTIFIED copies of the priority docume	
received.	
received in Application No. (Series Code/Serial Number)	
☐ received in this national stage application from the International Burea	au (PCT Rule 17.2(a)).
*Certified copies not received:	
☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §	§ 119(e).
Attachment(s)	
Information Disclosure Statement(s), PTO-1449, Paper No(s).	
☐ Interview Summary, PTO-413	
☐ Notice of Informal Patent Application, PTO-152	
— SEE OFFICE ACTION ON THE FOLLOWING	PACES
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DETAILED ACTION

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Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

- (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.
- 2. Claims 1, 3-5, 7, 21, 31, 33-35, 37, 52, 60-61 and 65 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. patent 5,752,042 granted to Cole et al.

Regarding claim 1, the patent to Cole meets the claimed limitation as follows:

"A method of maintaining application program components on a network comprising:

"maintaining on a server the application program, the program including components, each having a version identification, maintaining a catalog of components with the version identifications;" see column 2, lines 52-65 (Selection server . . . a name of the code update, a list of files which comprise the code update . . . and directory of each file)

"maintaining the application program on a client;

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in response to a call to the server from the client, causing the server to download the catalog to the client and, in the client, comparing the version identification between the components maintained on the server, indicated in the catalog, and the components maintained on the client;" see column 3, lines 14-27 (A user . . . download routine 39 stored in the content server 17.)

"updating the application program components on the client by downloading from the server to the client the selected components for which the version identifications do not match and replacing the selected components on the client;" see column 3, lines 36-39 (Next, the client downloads . . .)

"and executing the updated application program on the client." see column 3, lines
42-45 (The client . . . executes it.)

Regarding claim 3, the patent to Cole meets the claimed limitation as follows:

"A method as claimed in claim 1, further comprising updating the application program on the client by downloading from the server to the client the selected components not present on the client." see column 3, lines 57-62 (The selection update program . . . From further consideration.)

Regarding claim 4, the patent to Cole meets the claimed limitation as follows:

"A method as claimed in claim 1, wherein the server download the catalog and components to the client for updating the application program on the client by way of hypertext transfer protocol." see column 2, lines 47-49 (Communications . . . hypertext transfer protocol)

Regarding claim 5, the patent to Cole meets the claimed limitation as follows:

"A method as claimed in claim 1, wherein the server download the catalog and components to the client for updating the application program on the client by way of file transfer protocol." see column 2, lines 49-50 (. . . utilize file transfer protocol.)

Regarding claim 7, the patent to Cole meets the claimed limitation as follows:

"A method as claimed in claim 1, wherein the catalog maintained on the server includes directory locations on the client in which downloaded components are stored for proper execution of the application program." see column 4, lines 65-67 (. . . a directory which lists the files . . . program registry.)

Regarding claim 21, the patent to Cole meets the claimed limitation as follows:

"A method as claimed in claim 1, further comprising recording in a file the status of each updating of the application program including names of the components replaced, deleted or added on the client and related procedures for tracking and reporting the program updates." see column 6, lines 35-38 (... records status information ...)

Regarding claim 31, the patent to Cole meets the claimed limitation as follows:

"A system for maintaining an application program on a network comprising:

"a server for maintaining the application program, the program including components, each being provided with a version identification

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"a catalog on the server for specifying the components with the version identifications;" see column 2, lines 52-65 (Selection server . . . a name of the code update, a list of files which comprise the code update . . . and directory of each file)

"a client which maintains the application program and, where a user selects the application program to execute the program, first cause the server to download the catalog to the client, compares the version identifications of the components maintained on the server, indicated in the downloaded catalog, and the version identifications of the components maintained on the client, updates the application program on the client, updates the application program on the client the selected components on the client, and thereafter executes the updated application program." see column 3, lines 14-27 (A user ... download routine 39 stored in the content server 17.) and see column 3, lines 36-39 (Next, the client downloads ...) and see column 3, lines 42-45 (The client ... executes it.)

Regarding claim 33, the patent to Cole meets the claimed limitation as follows:

"A system as claimed in claim 31, wherein the application program on the client is updated by downloading from the server to the client the selected components not present on the client." see column 3, lines 57-62 (The selection update program . . . From further consideration.)

Regarding claim 34, the patent to Cole meets the claimed limitation as follows:

"A system as claimed in claim 31, wherein the plurality of servers downloads the catalog and components to the client for updating the application program on the client by way of hypertext transfer protocol." see column 2, lines 47-49 (Communications . . . hypertext transfer protocol . . .)

Regarding claim 35, the patent to Cole meets the claimed limitation as follows:

"A system as claimed in claim 31, wherein the plurality of servers downloads the catalog and components to the client for updating the application program on the client by way of file transfer protocol." see column 2, lines 49-50 (... utilize file transfer protocol.)

Regarding claim 37, the patent to Cole meets the claimed limitation as follows:

"A system as claimed in claim 31, wherein the catalog maintained on the server includes directory locations on the client in which downloaded components are stored for proper execution of the application program." see column 4, lines 65-67 (. . . a directory which lists the files . . . program registry.)

Regarding claim 52, the patent to Cole meets the claimed limitation as follows:

"A system as claimed in claim 31, further comprising a file on the client to record status of each updating of the application program, the status including names of the components replaced, deleted or added on the client and related procedures for tracking and reporting the program updates." see column 6, lines 35-38 (... records status information ...)

Regarding claim 60, the patent to Cole meets the claimed limitation as follows:

"A programmed data processing client comprising:

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"an application program including components, each being provided with a version identification and a launcher program which, when a user selects the application program to execute program:

causes server to download a catalog to the client, the catalog specifying the components with the version identifications;" see column 2, lines 52-65 (Selection server . . . a name of the code update, a list of files which comprise the code update . . . and directory of each file)

"compares the version identifications of the components indicated in the downloaded catalog with version identifications of the components maintained on the client;" see column 3, lines 14-27 (A user . . . comparing the client level information . . . download routine 39 stored in the content server 17.)

"updates the application program on the client by downloading from the server to the client the selected components for which the version identifications do not match and replacing the selected components on the client;" see column 3, lines 36-39 (Next, the client downloads . . .)

Regarding claim 61, the patent to Cole meets the claimed limitation as follows:

"A program on a storage device providing instructions for execution on a client, which:

"when a user selects to execute an application program, on the client, the application program including components, each component having a version

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identification, cause a server to download a catalog of components with the version identifications; "see column 3, lines 14-20 (A user . . . download routine 39 with client 14.)

"compare the version identifications indicated in the catalog with version identifications of the components maintained on the client;" see column 3, lines 23-27 (This determination . . . comparing the client level information . . . download routine 39 stored in the content server 17.)

"update the components on the client by downloading from the server to the client the selected components for which the version identifications do not match and replacing the selected components on the client;" see column 3, lines 36-39 (Next, the client downloads . . .)

Regarding claim 65, the patent to Cole meets the claimed limitation as follows:

"A method of maintaining application program in a client-server environment comprising:

"maintaining on a server the application program, the program including components, each having a version identification, maintaining a catalog of components with the version identifications;" see column 2, lines 52-65 (Selection server . . . a name of the code update, a list of files which comprise the code update . . . and directory of each file)

"in response to a first call to the server from a client, causing the server to download
the catalog to the client and the application program, maintaining on the client the
application program and information in the downloaded catalog including a list of the

components with the version identifications" see column 3, lines 14-27 (A user . . . download routine 39 stored in the content server 17.)

"in response to a subsequent call to the server from the client, causing the server to download a second catalog including the latest version identifications of the components and of any new additional components on the server, comparing in the client the latest version identifications of the components in the second catalog with the version identifications of the components maintained on the client;" see column 3, lines 40-47 (The furnishing . . . client 14.)

"updating the application program components on the client by downloading from the server to the client the selected components for which the version identifications do not match and replacing the selected components on the client;" see column 3, lines 36-39 (Next, the client downloads...)

"and executing the updated application program on the client." see column 3, lines 42-45 (The client . . . executes it.)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,752,042 granted to Cole et al and further in view of U.S. patent 5,734,898 granted to He.

Regarding claim 2, Cole et al discloses everything claimed, as applied above (see Claim 1), however Cole fails to specifically teach using cache memory to store components of the updated application program on the client. He teaches the use of cache memory in a client-server environment (see column 8, lines 56-57). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of He's client-server computer system and method for updating objects with Cole's method of updating an application program running on a client computer for the purpose of faster access to the software components needed for updating the application program on the client computer.

Regarding claim 32, Cole et al discloses everything claimed, as applied above (see Claim 31), however Cole fails to specifically teach using cache memory to store components of the updated application program on the client. He teaches the use of cache memory in a client-server environment (see column 8, lines 56-57). It would have been obvious to one of ordinary skill in

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the art at the time the invention was made to combine the teachings of He's client-server computer system and method for updating objects with Cole's method of updating an application program running on a client computer for the purpose of faster access to the software components needed for updating the application program on the client computer.

Claims 8-9, 38-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,752,042 granted to Cole et al and further in view of U.S. patent 5,721,911 granted to Ha.

Regarding claim 8, Cole et al discloses everything claimed, as applied above (see Claim 1), however Cole fails to specifically teach using a launcher program for executing and updating an application program. Ha teaches the step of using a launcher program to execute the application programs (see column 6, lines 19-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ha's mechanism for an information catalog system and with Cole's method of updating an application program running on a client computer for the purpose of facilitating an easier upgrade of an application program on a client computer.

Regarding claim 9, Cole et al and Ha discloses everything claimed, as applied above (see Claim 8), however Cole fails to specifically teach using a launcher program in the client environment but Ha teaches the use of a launcher program on a central processing unit (CPU) for executing and updating an application program. It would have been obvious to one of ordinary

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skill in the art at the time the invention was made to combine the teachings of Ha's mechanism for an information catalog system and with Cole's method of updating an application program running on a client computer for the purpose of facilitating an easier upgrade of an application program on a client computer.

Regarding claim 38, Cole et al discloses everything claimed, as applied above (see Claim 31), however Cole fails to specifically teach using a launcher program for executing and updating an application program. Ha teaches a system that uses a launcher program to execute the application programs (see column 6, lines 19-34). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ha's mechanism for an information catalog system and with Cole's system for updating an application program running on a client computer for the purpose of facilitating an easier upgrade of an application program on a client computer.

Regarding claim 39, Cole et al and Ha discloses everything claimed, as applied above (see Claim 38), however Cole fails to specifically teach using a launcher program in the client environment but Ha teaches a system that uses a launcher program on a central processing unit (CPU) for executing and updating an application program. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ha's mechanism for an information catalog system and with Cole's system for updating an application program running on a client computer for the purpose of facilitating an easier upgrade of an application program on a client computer.

Regarding claim 40, Cole et al and Ha discloses everything claimed, as applied above (see Claim 38), however Cole fails to specifically teach using a launcher program in the client environment but Ha teaches a system that uses a launcher program on a central processing unit (CPU) for executing and updating an application program. The launcher program is taught in Figure 4, with elements 71 and 66. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Ha's mechanism for an information catalog system and with Cole's system for updating an application program running on a client computer for the purpose of facilitating an easier upgrade of an application program on a client computer.

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Claim 62 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. patent 5,752,042 granted to Cole et al and further in view of U.S. patent 5,721,911 granted to Ha and further in view of U.S. patent 5,732,266 granted to Moore et al.

Regarding claim 62, the patent to Cole discloses the following:

"A method of installing and automatically updating application programs on a plurality of client

computers attached to a common network comprising the steps of:

"storing various components of the application programs on one or more server computers attached to the same network with each server operating with standard protocol to automatically transmit a specified file in response to a standard file transfer request;" (see column 3, lines 28-36)

"retrieving the current version of said catalog file and comparing the components and their version identification to corresponding information in a second catalog of application components already stored on the client computer;" (see column 3, lines 14-27)

"installing the retrieved components in a standard program component directory;" (see column 4, lines 65-67)

"storing the retrieved catalog file to identified the components present on the client in a subsequent update;" (see column 3, lines 56-62)

"and executing application program." (see column 3, lines 42-45).

However, Cole fails to specifically disclose the method of

"creating a catalog file which lists the names of all the required components of each of said application programs, and specifying for each component a current version identification and either a content of the component or a network address from which the component can be retrieved by the standard file transfer request;

"storing the catalog file on one or more of said server computers;

"and installing on each client computer a launcher program which operates as a proxy for each of said application programs and which executes steps for each application program;

Ha teaches the steps of creating a catalog file (see column 5, lines 27-50), storing the catalog file (see column 6, lines 35-48) and using a launcher program to execute the application programs (see column 6, lines 19-34). Ha and Cole fail to specifically teach the method of

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"retrieving from their designated network addresses any components which said launcher program determines as either not present or having an incorrect version identifications." Moore teaches the step of launching a program from a designated address (see column 5, lines 65-67 and column 6, lines 1-31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Moore's automatic launching of computer applications with Ha's mechanism for an information catalog system and with Cole's method of updating an application program running on a client computer for the purpose of facilitating an easier upgrade of an application program on a client computer.

Allowable Subject Matter

Claims 6, 10-20, 22-30, 36, 41-51, 53-59 and 63-64 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

- 5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - A. Killebrew et al (5,577,244) discloses a methods of applying software modifications.
- B. Kullick et al (5,732,275) discloses a software program running on a computer and is automatically managed, monitored and updated with a newer version in an automated fashion.

C. Gregerson (5,758,342) discloses a client server system wherein client files written to a client processor are invisible to the server.

- D. Galvin et al (5,768,511) discloses a method and system for managing in a network.
- 6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew Smithers, whose telephone number is (703) 308-9293. The examiner can normally be reached on M-TH from 7:30 a.m. to 6:00 p.m. EST.

If attempts to reach the examiner by phone fail, the examiner's supervisor, James Trammell, can be reached at (703) 305-9768. Additionally, the fax phone for Art Unit 2764 is (703) 308-5357.

Matthew Smithers

August 1, 1998

ERIC W. STAMBER

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DRIMARY EXAMINER

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